

TRANSMITTAL LETTER
(General - Patent Pending)

Docket No.
YOR920000555US1

In Re Application Of: **Mantena et al.**

Application No.

09/751,069

Filing Date

12/29/2000

Examiner

Lipman, Jacob

Customer No.

46843

Group Art Unit

2134

Confirmation No.

9009

Title: **METHOD, SYSTEM AND PROGRAM PRODUCT FOR SYNCHRONOUS COMMUNICATION BETWEEN A PUBLIC ELECTRONIC ENVIRONMENT AND A PRIVATE ELECTRONIC ENVIRONMENT**

COMMISSIONER FOR PATENTS:

Transmitted herewith is:

- (1) Copy of Non-Compliant Appeal Brief (37 CFR 4.37) (2 pages);
- (2) Amended Appellants' Appeal Brief to the Board of Patent Appeals and Interferences (50 pages); and
- (3) One (1) Acknowledgement Postcard.

in the above identified application.

- ☒ No additional fee is required.
- ☐ A check in the amount of _____ is attached.
- ☐ The Director is hereby authorized to charge and credit Deposit Account No. _____ as described below.
- ☐ Charge the amount of _____
- ☐ Credit any overpayment.
- ☐ Charge any additional fee required.
- ☐ Payment by credit card. Form PTO-2038 is attached.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.



Signature

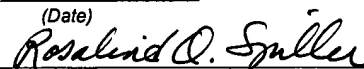
Dated: September 12, 2006

Wayne F. Reinke, Esq.
Registration No. 36,650
Heslin Rothenberg Farley & Mesiti P.C.
5 Columbia Circle
Albany, NY 12203-5160

Telephone: 518-452-5600
Facsimile: 518-452-5579

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on
September 12, 2006

(Date)



Signature of Person Mailing Correspondence

Rosalind Q. Spiller

Typed or Printed Name of Person Mailing Correspondence

cc:

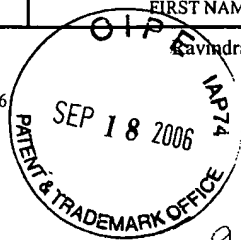


UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,069	12/29/2000	Avindra R. Mantena	YOR920000555US1	9009

7590 08/18/2006
WAYNE F. REINKE, Esq.
HESLIN & ROTHENBERG, P.C.
5 CLUMBIA CIRCLE
ALBANY, NY 12203-5160



1839.008
WER

EXAMINER

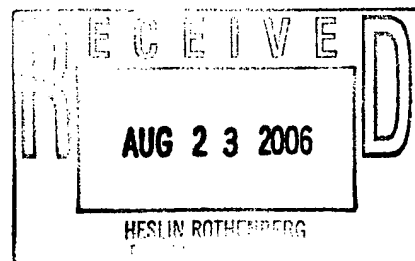
ART UNIT	PAPER NUMBER
----------	--------------

DATE MAILED: 08/18/2006

URGENT

Please find below and/or attached an Office communication concerning this application or proceeding.

DOCKETED 9/18/06



**Notification of Non-Compliant Appeal Brief
(37 CFR 41.37)**

Application No.

09/751,069

Examiner

LIPMAN, JACOB

Applicant(s)

MANTENA ET AL.

Art Unit

2134

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

The Appeal Brief filed on 23 June 2006 is defective for failure to comply with one or more provisions of 37 CFR 41.37.

To avoid dismissal of the appeal, applicant must file an amended brief or other appropriate correction (see MPEP 1205.03) within **ONE MONTH or THIRTY DAYS** from the mailing date of this Notification, whichever is longer.
EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136.

1. ☒ The brief does not contain the items required under 37 CFR 41.37(c), or the items are not under the proper heading or in the proper order.
2. ☒ The brief does not contain a statement of the status of all claims, (e.g., rejected, allowed, withdrawn, objected to, canceled), or does not identify the appealed claims (37 CFR 41.37(c)(1)(iii)).
3. ☐ At least one amendment has been filed subsequent to the final rejection, and the brief does not contain a statement of the status of each such amendment (37 CFR 41.37(c)(1)(iv)).
4. ☐ (a) The brief does not contain a concise explanation of the subject matter defined in each of the independent claims involved in the appeal, referring to the specification by page and line number and to the drawings, if any, by reference characters; and/or (b) the brief fails to: (1) identify, for each independent claim involved in the appeal and for each dependent claim argued separately, every means plus function and step plus function under 35 U.S.C. 112, sixth paragraph, and/or (2) set forth the structure, material, or acts described in the specification as corresponding to each claimed function with reference to the specification by page and line number, and to the drawings, if any, by reference characters (37 CFR 41.37(c)(1)(v)).
5. ☐ The brief does not contain a concise statement of each ground of rejection presented for review (37 CFR 41.37(c)(1)(vi)).
6. ☒ The brief does not present an argument under a separate heading for each ground of rejection on appeal (37 CFR 41.37(c)(1)(vii)).
7. ☐ The brief does not contain a correct copy of the appealed claims as an appendix thereto (37 CFR 41.37(c)(1)(viii)).
8. ☐ The brief does not contain copies of the evidence submitted under 37 CFR 1.130, 1.131, or 1.132 or of any other evidence entered by the examiner **and relied upon by appellant in the appeal**, along with a statement setting forth where in the record that evidence was entered by the examiner, as an appendix thereto (37 CFR 41.37(c)(1)(ix)).
9. ☐ The brief does not contain copies of the decisions rendered by a court or the Board in the proceeding identified in the Related Appeals and Interferences section of the brief as an appendix thereto (37 CFR 41.37(c)(1)(x)).
10. ☒ Other (including any explanation in support of the above items):

Item 1. The appeal brief should not be filed under CFR 1.191.

Item 2. The appeal brief fails to mention which claims are being appealed.

Item 6. The appeal brief fails to argue each ground of rejection under its own heading.

Other: The Evidence of appendix and Related proceeding appendix sections should state "none" if there are not such documents submitted.


Lorenda Hood
Patent Appeal Specialist



-1-

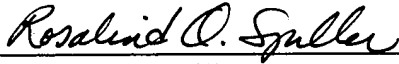
YOR920000555US1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellants: Mantena et al. Confirmation No.: 9009
Serial No.: 09/751,069 Group Art Unit: 2134
Filed: 12/29/2000 Examiner: Lipman, Jacob
Title: METHOD, SYSTEM AND PROGRAM PRODUCT FOR SYNCHRONOUS
COMMUNICATION BETWEEN A PUBLIC ELECTRONIC ENVIRONMENT
AND A PRIVATE ELECTRONIC ENVIRONMENT

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to: Mail Stop Appeal Briefs – Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on September 12, 2006.


Rosalind Q. Spiller

Date of Signature: September 12, 2006.

To: Mail Stop Appeal Briefs – Patents
Commissioner for Patents
P.O. Box 1450, Alexandria, VA 22313-1450

Dear Sir:

AMENDED APPELLANTS' APPEAL BRIEF TO THE BOARD OF
PATENT APPEALS AND INTERFERENCES

This Amended Appellants' Appeal Brief to the Board of Patent Appeals and Interferences is being submitted in response to a Notification of Non-Compliant Appeal Brief with a mailing date of August 18, 2006 and a due date of September 18, 2006 for a response thereto. Therefore, this Amended Appeal Brief is being timely filed, and no additional fee is required.

Appellants are appealing from a Final Rejection dated December 20, 2005, rejecting claims 1-112, all the claims being considered in the above-identified application. A Notice of Appeal with a Request for One-Month Extension of Time, and payment therefor, was timely filed on April 20, 2006, along with a Pre-Appeal Brief Request for Review and Remarks in Support of the Pre-Appeal Brief Request, and were received in the U.S. Patent and Trademark Office on April 20, 2006, with an Appeal Brief having been due by and filed on June 20, 2006.

REAL PARTY IN INTEREST

This application is assigned to International Business Machines Corporation by virtue of an assignment executed by the co-inventors on March 23, 2001, March 24, 2001, and March 30, 2006, and recorded with the United States Patent and Trademark Office at reel 012072, frame 0990, on August 9, 2001. Therefore, the real party in interest is International Business Machines Corporation.

RELATED APPEALS AND INTERFERENCES

A related case, U.S. Patent Application Serial No. 09/752,330 is currently under appeal, with an Appeal Brief filed on June 19, 2006, an Examiner's Answer having been mailed on September 8, 2006, with an Appellants' Reply Brief, or a Request for Oral Hearing, due November 8, 2006. Otherwise, to the knowledge of Appellants, Appellants' undersigned legal representative, or the assignee, there are no other appeals or interferences which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

STATUS OF CLAIMS

This patent application was filed on December 29, 2000, with the U.S. Patent and Trademark Office. As filed, the application included eighty-four (84), of which three (3) were independent claims (i.e., claims 1, 29 and 57).

On August 12, 2004, a first Office Action was mailed that included a rejection of claims 1-84. In particular, claims 1-7, 10, 11, 15, 16, 23, 29-35, 38, 39, 43, 44, 51, 57-63, 66, 67, 71, 72 and 79 were rejected under 35 U.S.C. §102(e), as being anticipated by Cohen et al. (U.S. Patent No. 6,286,028); claims 1-7, 10, 11, 14-17, 22-27, 29-35, 38, 39, 42-45, 50-55, 57-63, 66, 67, 70-73 and 78-83 were rejected under 35 U.S.C. §102(b), as being anticipated by ERPNet, as disclosed in Appellants' IDS as Dialog File 20, accession No. 02821200; and claims 8, 9, 12, 13, 18-21, 28, 36, 37, 40, 41, 46-49, 56, 64, 65, 68, 69, 74-77 and 84 were rejected under 35 U.S.C. §103(a) as being obvious over ERPNet.

In response to this Office Action, Appellants filed an Amendment and Response to Office Action on November 17, 2004, in which claims 3, 11, 16, 31, 39, 44, 59, 67 and 72 were amended, and claims 85-112 added, including one (1) independent claim (i.e., claim 85). No claims were canceled. Claims 1-112 remained pending.

Thereafter, a final Office Action was mailed on February 28, 2005, rejecting claims 1-112. In particular, claims 1-7, 10, 11, 15, 16, 23, 29-35, 38, 39, 43, 44, 51, 57-63, 66, 67, 71, 72, 79, 85-91, 94, 95, 99, 100 and 107 were rejected under 35 U.S.C. §102(e), were rejected as being anticipated by Cohen et al. (U.S. Patent No. 6,286,028); claims 1-7, 10, 11, 14-17, 22-27,

29-35, 38, 39, 42-45, 50-55, 57-63, 66, 67, 70-73, 78-83, 85-91, 94, 95, 98-101 and 106-111 were rejected under 35 U.S.C. §102(b), as being anticipated by ERPNet, Dialog File 20, accession No. 02821200; and claims 8, 9, 12, 13, 18-21, 28, 36, 37, 40, 41, 46-49, 56, 64, 65, 68, 69, 74-77, 84, 92, 93, 96, 97, 102-105 and 112, were rejected under 35 U.S.C. §103(a) as being obvious over ERPNet.

On April 28, 2005, Applicants filed an Amendment and Response to Final Office Action, addressing the rejections in the final Office Action, and amending claims 1, 29, 57 and 85. No claims were added or canceled. Therefore, claims 1-112 remained pending.

In reply to Appellants' Amendment and Response to Final Office Action, an Advisory Action was mailed on May 13, 2005. In response thereto, on May 27, 2005, Appellants submitted a Request for Continued Examination.

On August 26, 2005, a non-final Office Action was mailed, that included a rejection of claims 1-7, 10, 11, 14-17, 22-27, 29-35, 38, 39, 42-45, 50-55, 57-63, 66, 67, 70-73, 78-83, 85-91, 94, 95, 98-101, and 106-111, under 35 U.S.C. §102(b), as being anticipated by ERPNet, Dialog File 20, accession No. 02821200; claims 1, 29, 57 and 85 were rejected under 35 U.S.C. §102(b), as being anticipated by Gralla, "How the Internet Works"; and claims 8, 9, 12, 13, 18-21, 28, 36, 37, 40, 41, 46-49, 56, 64, 65, 68, 69, 74-77, 84, 92, 93, 96, 97, 102-105 and 112, were rejected under U.S.C. §103(a) as being obvious over ERPNet.

In response to this non-final Office Action, Appellants filed an Amendment and Response to Office Action on November 28, 2005, amending claims 1, 29, 57 and 85. No claims were added or canceled. Therefore, claims 1-112 remained pending.

In reply, a final Office Action was mailed on December 20, 2005, finally rejecting 1-7, 10, 11, 14-17, 22-27, 29-35, 38, 39, 42-45, 50-55, 57-63, 66, 67, 70-73, 78-83, 85-91, 94, 95, 98-101, and 106-111, under 35 U.S.C. §102(b), as being anticipated by ERPNet, as Dialog File 20, accession No. 02821200; and claims 8, 9, 12, 13, 18-21, 28, 36, 37, 40, 41, 46-49, 56, 64, 65, 68, 69, 74-77, 84, 92, 93, 96, 97, 102-105 and 112, were rejected under U.S.C. §103(a) as being obvious over ERPNet. Appellants filed an response after final rejection, dated February 21, 2006. However, no claims were amended. Claims 1-112 remained pending.

In reply to Appellants' response after final rejection, an Advisory Action was mailed on March 15, 2006. In response thereto, Appellants filed a Pre-Appeal Brief Request for Review, Remarks in support thereof, and a combined Notice of Appeal and Petition for Extension of Time on April 20, 2006. Thereafter, a Notice of Panel Decision from Pre-Appeal Brief Review was mailed on May 5, 2006, with a determination that the case proceed to the Board of Patent Appeals and Interferences and that the Appellants were required to submit an Appeal Brief.

Therefore, the status of the claims is as follows:

Claims allowed – None.

Claims objected to – None.

Claims rejected – 1-112; and

Claims canceled – None.

Appellants are appealing the rejection of claims 1-112, with each of the following claims being separately argued: 1, 3, 4, 10, 11, 14, 15 and 23.

STATUS OF AMENDMENTS

An amendment after final rejection was filed, dated February 21, 2006. However, only the cross-reference to related applications was updated; there were no claim amendments.

SUMMARY OF CLAIMED SUBJECT MATTER

Claim 1 recites a method for synchronous communication between a public electronic environment and a private electronic environment. As shown in FIG. 2, and described in the application starting at page 2, line 13, the public electronic environment comprises computing unit 202 with browser 204, global computer network 210, and commerce site 208 on server 206. The private electronic environment 238 comprises messaging middleware 212 with several components on either side of firewall 230, and computing unit 214 running back end ERP application 216. Note that server 206 sits in both the public environment (commerce site 208) and the private environment (messaging client 218). The method comprises automatically routing a communication from a user in the public electronic environment to the private electronic environment. See the specification at, for example, page 8, lines 6-19. The method also comprises causing a reply to the communication to be produced within the private electronic environment in real time. See the specification at page 3, lines 16-17 and page 9, line 16 to page 10, line 3, describing an example of a reply to communication being produced within the private electronic environment in real time. The method further comprises automatically returning the

reply from the private electronic environment to the public electronic environment. See the specification at page 10, lines 3-15.

Claim 3 depends from claim 2, and recites that the automatically routing comprises routing the communication through messaging middleware. See the present application at page 8, line 12 to page 9, line 14, describing routing the communication from messaging client 218 through firewall 230 to second messaging client 224. In addition, claim 3 recites that the causing comprises causing by the messaging middleware the ERP application to produce the reply while the front end application and the messaging middleware wait therefor. See the present application at page 9, lines 16-24, describing sending a command from module 236 to the ERP application 216 to produce the reply while messaging client 224 of messaging middleware 212 and browser 204 wait therefor.

Claim 4 depends from claim 3, and recites that the causing comprises causing by the messaging middleware a command to be issued to the ERP application to trigger production of the reply. See the present application at page 9, lines 16-24, describing sending a command from module 236 to the ERP application 216 to produce the reply.

Claim 10 depends from claim 7, and recites that the messaging middleware comprises a first messaging client on the hosting server (FIG. 2, messaging client 218 on server 206 for commerce site 208), a first messaging server (messaging server 220), a second messaging server (messaging server 222), and a second messaging client (messaging client 224), and that forwarding the communication from the hosting server to the messaging middleware comprises forwarding the communication from the first messaging client to the first messaging server,

forwarding the communication from the first messaging server to the second messaging server, and forwarding the communication from the second messaging server to the second messaging client. See the present application at page 8, line 12 to page 9, line 4, and page 9, lines 12-14.

Claim 11 depends from claim 10, and recites that forwarding the communication from the first messaging client (messaging client 218, FIG. 2) to the first messaging server (messaging server 220) comprises generating by the first messaging client the token identifier and forwarding a token identifier along with the communication, and wherein the automatically returning comprises returning the token identifier to the first messaging client for verification. As noted in the present application at page 8, lines 18-19, the token identifier tracks the message path.

Claim 14 depends from claim 10, and recites that forwarding the communication from the first messaging server (FIG. 2, messaging server 220) to the second messaging server (messaging server 222) comprises forwarding the communication across a fire wall (230). As described in the application at page 9, lines 1-5, when the communication is placed in transmission queue 226, it is transmitted over open channel 242 across firewall 230 to holding queue 232 of messaging server 222.

Claim 15 depends from claim 10, and recites that the second messaging client (FIG. 2, messaging client 224) comprises a module (module 236) for issuing a command to the ERP application (ERP application 216), wherein the causing comprises issuing the command from the second messaging client to the ERP application to trigger production of the reply, and wherein forwarding the communication from the messaging middleware to the ERP application

comprises forwarding the communication from the second messaging client to the ERP application (over standard connection 246). See the present application at page 9, lines 6-24.

Claim 23 depends from claim 3, and recites that the front end application comprises a browser (FIG. 2, browser 204), wherein the messaging middleware comprises at least two messaging clients (messaging clients 218 and 224) and at least one messaging server (messaging servers 220 and 222). See also the present application at page 10, lines 16-22. Claim 23 also recites that the automatically routing comprises sending the communication from the browser to a hosting server for a site on a global computer network, wherein one of the at least two messaging clients resides on the hosting server; forwarding the communication from the hosting server to the at least one messaging server; forwarding the communication from the at least one messaging server to another of the at least two messaging clients; and forwarding the communication from the another of the at least two messaging clients to the ERP application. See the present application at page 8, line 7 to page 9, line 24.

Claim 29 recites a system for synchronous communication between a public electronic environment and a private electronic environment. One example of such a system is shown in FIG. 2, and generally described in the specification as filed at page 6, line 13 through page 8, line 5. The system comprises means for automatically routing a communication from a user in the public electronic environment to the private electronic environment. A user sends a communication via browser 204 running on computing unit 202 over global computer network 210 to commerce site 208 running on server 206. Messaging client 218 routes the communication to private electronic environment 238. See the specification at page 8, lines

6-13. Messaging client 218 connects to messaging server 220 over a standard connection 240, then sends the communication to the messaging server with an identification of second messaging server 222. The communication is temporarily placed in transmission queue 226 of messaging server 220, then transmitted over open channel 242 (a standard connection monitored and controlled by channel software on messaging server 222) across firewall 230 to second messaging server 222. Once received, the communication is placed in holding queue 232 of the second messaging server. The system also comprises means for causing a reply to the communication to be produced within the private electronic environment in real time. Placing the communication in holding queue 232 of second messaging server 222 in some manner results in messaging client 224 being woken up. Module 236 then issues a command to ERP application 216 over standard connection 246 to produce a reply to communication. The ERP application then takes whatever action indicated by the command. See the application at page 8, line 13 to page 9, line 24. The system further comprises means for automatically returning the reply from the private electronic environment to the public electronic environment. As shown in FIG. 2 and described in the specification starting at page 11, line 1, the reply is returned over standard connections 248 and 250, to messaging server 222, which places it in reply queue 234. The reply queue points to messaging server 220, so the reply is transferred over open channel 252 to messaging server 220, which places the reply in local queue 228. When messaging client 218 detects data in local queue, it retrieves the reply over standard connection 254. Commerce site 208 then returns the reply to browser 204 for display over global computer network 210.

Claim 31 depends from claim 30, and recites that the means for automatically routing comprises means for routing the communication through messaging middleware, and that the means for causing comprises means for causing by the messaging middleware the ERP application to produce the reply while the front end application and the messaging middleware wait therefor. A user sends a communication via browser 204 running on computing unit 202 over global computer network 210 to commerce site 208 running on server 206. Messaging client 218 routes the communication to private electronic environment 238. See the specification at page 8, lines 6-13. Messaging client 218 connects to messaging server 220 over a standard connection 240, then sends the communication to the messaging server with an identification of second messaging server 222. The communication is temporarily placed in transmission queue 226 of messaging server 220, then transmitted over open channel 242 (a standard connection monitored and controlled by channel software on messaging server 222) across firewall 230 to second messaging server 222. Once received, the communication is placed in holding queue 232 of the second messaging server. The system also comprises means for causing a reply to the communication to be produced within the private electronic environment in real time. Placing the communication in holding queue 232 of second messaging server 222 in some manner results in messaging client 224 being woken up. Module 236 then issues a command to ERP application 216 over standard connection 246 to produce a reply to communication. The ERP application then takes whatever action indicated by the command. See the application at page 8, line 13 to page 9, line 24.

Claim 32 depends from claim 31, and recites that the means for causing further comprises means for causing by the messaging middleware a command to be issued to the ERP application to trigger production of the reply. Placing the communication in holding queue 232 of second messaging server 222 in some manner results in messaging client 224 being woken up. Module 236 then issues a command to ERP application 216 over standard connection 246 to produce a reply to communication. The ERP application then takes whatever action indicated by the command. See the application at page 8, line 13 to page 9, line 24.

Claim 38 depends from claim 35, and recites that the messaging middleware comprises a first messaging client on the hosting server (FIG. 2, messaging client 218 on server 206 for commerce site 208), a first messaging server (messaging server 220), a second messaging server (messaging server 222), and a second messaging client (messaging client 224), and wherein the means for forwarding the communication from the hosting server to the messaging middleware comprises means for forwarding the communication from the first messaging client to the first messaging server. See the application at page 8, lines 12-25. Claim 38 also recites that the means for forwarding the communication from the hosting server to the messaging middleware comprises means for forwarding the communication from the first messaging server to the second messaging server. See the application at page 9, lines 1-5. Claim 38 also recites that the means for forwarding the communication from the hosting server to the messaging middleware comprises means for forwarding the communication from the second messaging server to the second messaging client. See the application at page 9, lines 6-16.

Claim 39 depends from claim 38, and recites that the means for forwarding the communication from the first messaging client to the first messaging server comprises means for generating by the first messaging client a token identifier (page 8, lines 5-7) and means for forwarding the token identifier along with the communication (page 8, lines 5-7), and wherein the means for automatically returning comprises means for returning the token identifier to the first messaging client for verification (page 6, line 19 and page 10, lines 1-3).

Claim 42 depends from claim 38, and recites that the means for forwarding the communication from the first messaging server to the second messaging server comprises means for forwarding the communication across a fire wall (page 7, lines 11-17; page 9, lines 1-5).

Claim 43 depends from claim 38, and recites that the second messaging client comprises a module (FIG. 2, module 236 of second messaging client 224; page 9, lines 6-18) for issuing a command to the ERP application, wherein the means for causing comprises issuing the command from the second messaging client to the ERP application to trigger production of the reply, and wherein means for forwarding the communication from the messaging middleware to the ERP application comprises means for forwarding the communication from the second messaging client to the ERP application (module 236 issues command to ERP application 216 on computing unit 214 over standard connection 246).

Claim 51 depends from claim 31, and recites that the front end application comprises a browser (FIG. 2, browser 204), wherein the messaging middleware comprises at least two messaging clients (messaging clients 218 and 224) and at least one messaging server (messaging servers 220 and 222, but see also page 10, lines 16-22), and wherein the means for automatically

routing comprises means for sending the communication from the browser to a hosting server for a site on a global computer network, wherein one of the at least two messaging clients resides on the hosting server (browser 204 on computing unit 202 to commerce site 208 on server 206 over global computer network 210 via HTTP; page 5, line 12 to page 6, line 18). Claim 51 also recites that the means for automatically routing comprises: means for forwarding the communication from the hosting server to the at least one messaging server (messaging client 218 on server 206 to transmission queue 226 of messaging server 220 over standard connection 240; page 8, lines 12-25); means for forwarding the communication from the at least one messaging server to another of the at least two messaging clients (transmission queue 226 to holding queue 232 on messaging server 222 over open channel 242 across firewall 230, and then to messaging client 224 over standard connection 244; page 9, lines 1-16), and means for forwarding the communication from the another of the at least two messaging clients to the ERP application (from module 236 on messaging client 224 to ERP application 216 on computing unit 214 over standard connection 246; page 9, lines 16-20).

Claim 57 recites at least one program storage device readable by a machine, tangibly embodying at least one program of instructions executable by the machine to perform a method for synchronous communication between a public electronic environment and a private electronic environment. See the application at page 11, line 23 to page 12, line 1. As shown in FIG. 2, and described in the application starting at page 2, line 13, the public electronic environment comprises computing unit 202 with browser 204, global computer network 210, and commerce site 208 on server 206. The private electronic environment 238 comprises messaging

middleware 212 with several components on either side of firewall 230, and computing unit 214 running back end ERP application 216. Note that server 206 sits in both the public environment (commerce site 208) and the private environment (messaging client 218). The method comprises automatically routing a communication from a user in the public electronic environment to the private electronic environment. See the specification at, for example, page 8, lines 6-19. The method also comprises causing a reply to the communication to be produced within the private electronic environment in real time. See the specification at page 3, lines 16-17 and page 9, line 16 to page 10, line 3, describing an example of a reply to communication being produced within the private electronic environment in real time. The method further comprises automatically returning the reply from the private electronic environment to the public electronic environment. See the specification at page 10, lines 3-15.

Claim 85 recites a method for providing a computing infrastructure. See the present application at, for example, page 11, lines 13-14. The method comprises integrating computer-readable code into a computing system, wherein the computer-readable code in combination with the computing system is adapted to perform automatically routing a communication from a user in a public electronic environment to a private electronic environment. See the present application at page 11, line 23 to page 12, line 1. As shown in FIG. 2, and described in the application starting at page 2, line 13, the public electronic environment comprises computing unit 202 with browser 204, global computer network 210, and commerce site 208 on server 206. The private electronic environment 238 comprises messaging middleware 212 with several components on either side of firewall 230, and computing unit 214 running back end ERP

application 216. Note that server 206 sits in both the public environment (commerce site 208) and the private environment (messaging client 218). The computer-readable code in combination with the computing system is also adapted to perform causing a reply to the communication to be produced within the private electronic environment in real time. See the specification at page 3, lines 16-17 and page 9, line 16 to page 10, line 3, describing an example of a reply to communication being produced within the private electronic environment in real time. The computer-readable code in combination with the computing system is further adapted to perform automatically returning the reply from the private electronic environment to the public electronic environment. See the specification at page 10, lines 3-15.

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

1. The final Office Action rejected claims 1-7, 10, 11, 14-17, 22-27, 29-35, 38, 39, 42-45, 50 55, 57-63, 66, 67, 70 73, 78-83, 85-91, 94, 95, 98-101, and 106-111, under 35 U.S.C. §102(b), as allegedly anticipated by ERPNet, as Dialog File 20, accession No. 02821200.
2. The final Office Action also rejected claims 1, 29, 57 and 85 under 35 U.S.C. §102(b), as allegedly anticipated by Gralla, "How the Internet Works."

ARGUMENT

I. Rejection under 35 U.S.C. §102(b) over ERPNet (Dialog File 20, accession No. 02821200.

Claims 1-7, 10, 11, 14-17, 22-27, 29-35, 38, 39, 42-45, 50-55, 57-63, 66, 67, 70-73, 78-83, 85-91, 94, 95, 98-101, and 106-111:

Claims 1-7, 10, 11, 14-17, 22-27, 29-35, 38, 39, 42-45, 50-55, 57-63, 66, 67, 70-73, 78-83, 85-91, 94, 95, 98-101, and 106-111 stand rejected under 35 U.S.C. §102(b) as being obvious over ERPNet (Dialog File 20, accession No. 02821200. Appellants respectfully submit that the rejection of these claims is erroneous and respectfully request reversal of this rejection for at least the reasons set forth below.

With respect to the anticipation rejection, it is well settled that a claimed invention is not anticipated unless a single prior art reference discloses: (1) all the same elements of the claimed invention; (2) found in the same situation as the claimed invention; (3) united in the same way as the claimed invention; (4) in order to perform the identical function of the claimed invention. In this instance, ERPNet fails to disclose at least one element of each of the independent claims and as a result does not anticipate Appellant's invention.

Claim 1 recites, for example, causing a reply to the communication to be produced within the private electronic environment in real time.

Appellants could find no disclosure, teaching or suggestion in ERPNet of obtaining a reply within a private electronic environment in response to a user communication, or doing so in real time. Appellants point out that the example given for the system in ERPNet is the ordering of an automobile. No reply to the order per se is disclosed; rather, the progress of the order is tracked. Against the real time aspect of claim 1, the final Office Action cites the first paragraph on page two of ERPNet (i.e., paragraph nine of the reference). However, the cited paragraph, in conjunction with the paragraph immediately prior to that cited, actually discusses the order flowing from the front end to the back end (i.e., one way). There is no mention of a reply being produced.

Moreover, Appellants submit that one of ordinary skill in the art would understand what is meant by “real time” in the context of claim 1. As one example, a definition for “real time” from the well-known whatis.com information technology site is given as (hard copy included with response dated February 21, 2006):

Real time is a level of computer responsiveness that a user senses as sufficiently immediate or that enables the computer to keep up with some external process (for example, to present visualizations of the weather as it constantly changes). Real time is an adjective pertaining to computers or processes that operate in real time. Real time describes a human rather than a machine sense of time.

The above definition is also consistent with the description of a communication example given in the present application starting at page 8, line 6. See also, for example, page 3, line 16. The Advisory Action alleges indefiniteness of “sufficiently immediate” above. However, Appellants are only citing the definition as an indication of what one of ordinary skill in the art would understand “real time” to mean; it is not a definition from the present application.

Claim 1 also recites, as another example, automatically returning the reply from the private electronic environment to the public electronic environment. Against this aspect of claim 1, the final Office Action cites to paragraph 8 of ERPNet. However, that paragraph discusses parts of the journey to the SAP R/3 (back end) system, and not any communication (let alone a reply) from the back end to the front end.

Therefore, Appellants submit that claim 1 cannot be anticipated by, or made obvious over, ERPNet.

Claims 29, 57 and 85 contain a limitation similar to that argued above with respect to claim 1. Therefore, claims 29, 57 and 85 also cannot be anticipated by, or made obvious over, ERPNet.

Appellants submit that the dependent claims are allowable for the same reasons as the independent claims from which they directly or ultimately depend, as well as for their additional limitations.

For example, claim 3 recites messaging middleware causing the ERP application to produce the reply while the front end application and the messaging middleware wait therefore.

Against claim 3, the final Office Action cites to the disclosure of ERPNet regarding MQSeries and MSMQ. However, the mere mention of such applications does not disclose a reply from the ERP application, or messaging middleware causing the same, much less while the front end application and the messaging middleware wait (recall that claim 1 recites the reply is produced in real time).

Therefore, Appellants submit that claim 3 cannot be anticipated by, or made obvious over, ERPNet.

Claims 31, 59 and 87 contain a limitation similar to that argued above with respect to claim 3. Therefore, claims 31, 59 and 87 also cannot be anticipated by, or made obvious over, ERPNet.

As another example, claim 4 recites that the causing further comprises causing by the messaging middleware a command to be issued to the ERP application to trigger production of the reply.

Against claim 4, the final Office Action cites to the disclosure of ERPNet regarding MQSeries and MSMQ. However, the mere mention of such applications does not disclose a command issued from messaging middleware to an ERP application to trigger production of a reply within a private electronic environment in real time.

Therefore, Appellants submit that claim 4 cannot be anticipated by, or made obvious over, ERPNet.

Claims 32, 60 and 88 contain a limitation similar to that argued above with respect to claim 4. Therefore, claims 32, 60 and 88 also cannot be anticipated by, or made obvious over, ERPNet.

As another example, claim 10 recites details regarding forwarding the communication from the hosting server to the messaging middleware, specifying a path through particular components of the messaging middleware.

Against claim 10, the final Office Action cites to paragraph 6 of ERPNet, disclosing a Java-enabled web browser, SAP R/3 and MQSeries or MSMQ. However, the mere mention of MQSeries and MSMQ does not alone disclose the claimed messaging middleware components or the particular flow of communication forwarding between the components.

Therefore, Appellants submit that claim 10 cannot be anticipated by, or made obvious over, ERPNet.

Claims 38, 66 and 94 contain a limitation similar to that argued above with respect to claim 10. Therefore, claims 38, 66 and 94 also cannot be anticipated by, or made obvious over, ERPNet.

As still another example, claim 11 recites generating, forwarding and returning a token identifier to/from particular messaging middleware components. Against claim 11, the final Office Action cites to paragraph 9 of ERPNet, mentioning tracking the automobile order. However, Appellants submit the cited section fails to disclose anything regarding the claimed token identifier or the particular path to/from the messaging middleware components.

Therefore, Appellants submit that claim 11 cannot be anticipated by, or made obvious over, ERPNet.

Claims 39, 67 and 95 contain a limitation similar to that argued above with respect to claim 11. Therefore, claims 39, 67 and 95 also cannot be anticipated by, or made obvious over, ERPNet.

As yet another example, claim 14 recites forwarding the communication between particular messaging middleware components across a firewall. Against claim 14, the final Office Action cites to paragraph 14 of ERPNet. However, the cited section of ERPNet actually discloses a year 2000 firewall to block messages and send them back, the opposite of the claimed forwarding.

Therefore, Appellants submit that claim 14 cannot be anticipated by, or made obvious over, ERPNet.

Claims 42, 70 and 98 contain a limitation similar to that argued above with respect to claim 14. Therefore, claims 42, 70 and 98 also cannot be anticipated by, or made obvious over, ERPNet.

As another example, claim 15 recites, in part, a module within a particular component of the messaging middleware for issuing a command to the ERP application to trigger production of the reply. Against claim 15, the final Office Action cites to paragraph 6 of ERPNet, disclosing a Java-enabled web browser, SAP R/3 and MQSeries or MSMQ. However, the mere mention of MQSeries and MSMQ does not alone disclose the claimed module or the reply-triggering command.

Therefore, Appellants submit that claim 15 cannot be anticipated by, or made obvious over, ERPNet.

Claims 43, 71 and 99 contain a limitation similar to that argued above with respect to claim 15. Therefore, claims 43, 71 and 99 also cannot be anticipated by, or made obvious over, ERPNet.

As still another example, claim 23 recites details regarding the path of the communication to the ERP application, including forwarding to particular components of the messaging middleware. Against claim 23, the final Office Action cites to paragraph 6 of ERPNet, disclosing a Java-enabled web browser, SAP R/3 and MQSeries or MSMQ. However, the mere mention of MQSeries and MSMQ does not alone disclose the claimed messaging middleware components or the particular flow of communication forwarding that is claimed.

Therefore, Appellants submit that claim 23 cannot be anticipated by, or made obvious over, ERPNet.

Claims 51, 79 and 107 contain a limitation similar to that argued above with respect to claim 23. Therefore, claims 51, 79 and 107 also cannot be anticipated by, or made obvious over, ERPNet.

II. Rejection under 35 U.S.C. §102(b) over Gralla “How the Internet Works.”

Claims 1, 29, 57 and 85:

Claims 1, 29, 57 and 85 stand rejected under 35 U.S.C. §102(b), as allegedly anticipated by Gralla, "How the Internet Works." Appellants respectfully submit that the rejection of these claims is erroneous and respectfully request reversal of this rejection for at least the reasons set forth below.

With respect to the anticipation rejection, it is well settled that a claimed invention is not anticipated unless a single prior art reference discloses: (1) all the same elements of the claimed invention; (2) found in the same situation as the claimed invention; (3) united in the same way as the claimed invention; (4) in order to perform the identical function of the claimed invention. In this instance, Gralla fails to disclose at least one element of each of the independent claims and as a result does not anticipate Appellant's invention.

Amended claim 1 recites, for example, automatically routing a communication from a user in the public electronic environment to the private electronic environment. Against this aspect of claim 1, the final Office Action cites to Gralla at page 263, step 4. However, Appellants submit that the transaction server is referred to in Gralla as "the site's," and the information is said to be sent "from the customer's computer to the ... transaction server ... over the internet ... [and] encrypted[.]" This results in a new inquiry from the transaction server to the credit card company, rather than routing the customer's communication. As shown on pages 262 and 263, the customer fills out an order form, then the transaction server sends a separate request ("OK to Accept?") to the bank to check the validity of the credit card. Thus, Appellants submit that the communication from the user to the transaction server (the order form) is not being routed to a private electronic environment.

In addition, contrary to the allegation in the final Office Action, Appellants submit one of ordinary skill would not view the transaction server as a user. In the Gralla scenario, the user is the customer. Moreover, Appellants submit that the portion of the transaction server actually communicating with the bank is part of a private environment that includes the bank. Appellants submit one of ordinary skill would assume separation of the public and private environments for security, though Gralla is silent on such details. Further, Appellants disagree that the order form is a request for a credit check. The order form is a request for goods or services, carrying with it express or implied permission to check the credit card number being used for payment.

Amended claim 1 also recites, as another example, causing a reply to the communication to be produced within the private electronic environment in real time. Against this aspect of claim 1, the final Office Action cites to Gralla at page 263, step 5. However, Appellants submit what is actually sent from the transaction server to the credit card company is a new inquiry regarding the users credit card number that is generated by the transaction server. Thus, any reply from the credit card company is not a reply to the user communication, but a reply to the newly generated inquiry from the transaction server.

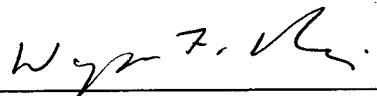
Finally, amended claim 1 also recites automatically returning the reply from the private electronic environment to the public electronic environment. Against this aspect of claim 1, the final Office Action cites to Gralla at page 263, step 6. However, Appellants submit there is no disclosure, teaching or suggestion that the reply from the credit card company goes anywhere but to the transaction server. Thus, even ignoring the fact that the reply is not a reply to the user communication, in any case it is never returned to the public electronic environment, as claimed.

Therefore, Appellants submit that claim 1 cannot be anticipated by, or made obvious over, Gralla.

Claims 29, 57 and 85 contain limitations similar to that argued above with respect to claim 1. Therefore, claims 29, 57 and 85 also cannot be anticipated by, or made obvious over, Gralla.

CONCLUSION

In conclusion, Appellants submit that none of claims 1-7, 10, 11, 14-17, 22-27, 29-35, 38, 39, 42-45, 50 55, 57-63, 66, 67, 70 73, 78-83, 85-91, 94, 95, 98-101, and 106-111 is anticipated by ERPNet, and that none of claims 1, 29, 57 and 85 is anticipated by Gralla. Therefore, Appellants submit that the final Office Action should be reversed in all respects.



Wayne F. Reinke, Esq.
Attorney for Appellants
Registration No. 36,650

Dated: September 12, 2006.

HESLIN ROTHENBERG FARLEY & MESITI P.C.
5 Columbia Circle
Albany, New York 12203-5160
Telephone: (518) 452-5600
Facsimile: (518) 452-5579

CLAIMS APPENDIX

1. (Previously Presented) A method for synchronous communication between a public electronic environment and a private electronic environment, comprising:
 - automatically routing a communication from a user in the public electronic environment to the private electronic environment;
 - causing a reply to the communication to be produced within the private electronic environment in real time; and
 - automatically returning the reply from the private electronic environment to the public electronic environment.
2. (Original) The method of claim 1, wherein the public electronic environment comprises a front end application, wherein the private electronic environment comprises a back end Enterprise Resource Planning (ERP) application, wherein the automatically routing comprises automatically routing the communication from the front end application to the back end ERP application, wherein the causing comprises causing the ERP application to produce the reply, and wherein the automatically returning comprises automatically returning the reply from the ERP application to the front end application for providing to the user.
3. (Previously Presented) The method of claim 2, wherein the automatically routing comprises routing the communication through messaging middleware, and wherein the causing comprises causing by the messaging middleware the ERP application to produce the reply while the front end application and the messaging middleware wait therefor.
4. (Original) The method of claim 3, wherein the causing further comprises causing by the messaging middleware a command to be issued to the ERP application to trigger production of the reply.
5. (Original) The method of claim 3, wherein the automatically returning comprises returning the reply from the ERP application to the front end application through the messaging middleware.

6. (Original) The method of claim 3, wherein the front end application comprises a browser.

7. (Original) The method of claim 6, wherein the automatically routing comprises:

sending the communication from the browser to a hosting server for a site on a global computer network;

forwarding the communication from the hosting server to the messaging middleware; and

forwarding the communication from the messaging middleware to the ERP application.

8. (Original) The method of claim 7, wherein the sending comprises employing encryption for the communication.

9. (Original) The method of claim 8, wherein the employing comprises employing at least 128-bit Secure Socket Layer (SSL) encryption.

10. (Original) The method of claim 7, wherein the messaging middleware comprises a first messaging client on the hosting server, a first messaging server, a second messaging server, and a second messaging client, and wherein forwarding the communication from the hosting server to the messaging middleware comprises:

forwarding the communication from the first messaging client to the first messaging server;

forwarding the communication from the first messaging server to the second messaging server; and

forwarding the communication from the second messaging server to the second messaging client.

11. (Previously Presented) The method of claim 10, wherein forwarding the communication from the first messaging client to the first messaging server comprises generating by the first messaging client the token identifier and forwarding a token identifier along with the communication, and wherein the automatically returning comprises returning the token identifier to the first messaging client for verification.

12. (Original) The method of claim 10, wherein forwarding the communication from the first messaging client to the first messaging server comprises encrypting the communication by the first messaging client.

13. (Original) The method of claim 12, wherein forwarding the communication from the second messaging server to the second messaging client comprises decrypting the communication by the second messaging server.

14. (Original) The method of claim 10, wherein forwarding the communication from the first messaging server to the second messaging server comprises forwarding the communication across a fire wall.

15. (Original) The method of claim 10, wherein the second messaging client comprises a module for issuing a command to the ERP application, wherein the causing comprises issuing the command from the second messaging client to the ERP application to trigger production of the reply, and wherein forwarding the communication from the messaging middleware to the ERP application comprises forwarding the communication from the second messaging client to the ERP application.

16. (Previously Presented) The method of claim 10, wherein forwarding the communication from the messaging middleware to the ERP application comprises forwarding the communication from the second messaging client to the ERP application, and wherein the automatically returning comprises:

- sending the reply from the ERP application to the second messaging client;
- forwarding the reply from the second messaging client to the second messaging server;
- forwarding the reply from the second messaging server to the first messaging server;
- forwarding the reply from the first messaging server to the first messaging client on the hosting server; and
- returning the reply from the hosting server to the browser for display.

17. (Original) The method of claim 16, wherein forwarding the reply from the second server to the first server comprises forwarding the reply through a fire wall.

18. (Original) The method of claim 16, wherein forwarding the reply from the second messaging client to the second server comprises encrypting the reply.

19. (Original) The method of claim 18, wherein forwarding the reply from the first server to the first messaging client on the hosting server comprises decrypting the reply.

20. (Original) The method of claim 16, wherein returning the reply from the hosting server to the browser for display thereby comprises employing encryption for the reply.

21. (Original) The method of claim 20, wherein the employing comprises employing at least 128-bit Secure Socket Layer (SSL) encryption.

22. (Original) The method of claim 7, wherein forwarding the communication from the hosting server to the messaging middleware and forwarding the communication from the messaging middleware to the ERP application comprise forwarding over a private network.

23. (Original) The method of claim 3, wherein the front end application comprises a browser, wherein the messaging middleware comprises at least two messaging clients and at least one messaging server, and wherein the automatically routing comprises:

 sending the communication from the browser to a hosting server for a site on a global computer network, wherein one of the at least two messaging clients resides on the hosting server;

 forwarding the communication from the hosting server to the at least one messaging server;

 forwarding the communication from the at least one messaging server to another of the at least two messaging clients; and

 forwarding the communication from the another of the at least two messaging clients to the ERP application.

24. (Original) The method of claim 3, wherein the messaging middleware comprises MQSERIES and the ERP application comprises SAP.

25. (Original) The method of claim 3, wherein the messaging middleware comprises MQSERIES.

26. (Original) The method of claim 3, wherein the messaging middleware comprises MSMQ.

27. (Original) The method of claim 2, wherein the ERP application comprises SAP.

28. (Original) The method of claim 2, wherein the ERP application comprises BAAN.

29. (Previously Presented) A system for synchronous communication between a public electronic environment and a private electronic environment, comprising:

means for automatically routing a communication from a user in the public electronic environment to the private electronic environment;

means for causing a reply to the communication to be produced within the private electronic environment in real time; and

means for automatically returning the reply from the private electronic environment to the public electronic environment.

30. (Original) The system of claim 29, wherein the public electronic environment comprises a front end application, wherein the private electronic environment comprises a back end Enterprise Resource Planning (ERP) application, wherein the means for automatically routing comprises means for automatically routing the communication from the front end application to the back end ERP application, wherein the means for causing comprises means for causing the ERP application to produce the reply, and wherein the means for automatically returning comprises means for automatically returning the reply from the ERP application to the front end application for providing to the user.

31. (Previously Presented) The system of claim 30, wherein the means for automatically routing comprises means for routing the communication through messaging middleware, and wherein the means for causing comprises means for causing by the messaging middleware the ERP application to produce the reply while the front end application and the messaging middleware wait therefor.

32. (Original) The system of claim 31, wherein the means for causing further comprises means for causing by the messaging middleware a command to be issued to the ERP application to trigger production of the reply.

33. (Original) The system of claim 31, wherein the means for automatically returning comprises means for returning the reply from the ERP application to the front end application through the messaging middleware.

34. (Original) The system of claim 31, wherein the front end application comprises a browser.

35. (Original) The system of claim 34, wherein the means for automatically routing comprises:

means for sending the communication from the browser to a hosting server for a site on a global computer network;

means for forwarding the communication from the hosting server to the messaging middleware; and

means for forwarding the communication from the messaging middleware to the ERP application.

36. (Original) The system of claim 35, wherein the means for sending comprises means for employing encryption for the communication.

37. (Original) The system of claim 36, wherein the means for employing comprises means for employing at least 128-bit Secure Socket Layer (SSL) encryption.

38. (Original) The system of claim 35, wherein the messaging middleware comprises a first messaging client on the hosting server, a first messaging server, a second messaging server, and a second messaging client, and wherein means for forwarding the communication from the hosting server to the messaging middleware comprises:

means for forwarding the communication from the first messaging client to the first messaging server;

means for forwarding the communication from the first messaging server to the second messaging server; and

means for forwarding the communication from the second messaging server to the second messaging client.

39. (Previously Presented) The system of claim 38, wherein means for forwarding the communication from the first messaging client to the first messaging server comprises means for generating by the first messaging client a token identifier and means for forwarding the token identifier along with the communication, and wherein the means for automatically returning comprises means for returning the token identifier to the first messaging client for verification.

40. (Original) The system of claim 38, wherein means for forwarding the communication from the first messaging client to the first messaging server comprises means for encrypting the communication by the first messaging client.

41. (Original) The system of claim 40, wherein means for forwarding the communication from the second messaging server to the second messaging client comprises means for decrypting the communication by the second messaging server.

42. (Original) The system of claim 38, wherein means for forwarding the communication from the first messaging server to the second messaging server comprises means for forwarding the communication across a fire wall.

43. (Original) The system of claim 38, wherein the second messaging client comprises a module for issuing a command to the ERP application, wherein the means for causing comprises issuing the command from the second messaging client to the ERP application to trigger production of the reply, and wherein means for forwarding the communication from the messaging middleware to the ERP application comprises means for forwarding the communication from the second messaging client to the ERP application.

44. (Previously Presented) The system of claim 38, wherein means for forwarding the communication from the messaging middleware to the ERP application comprises means for forwarding the communication from the second messaging client to the ERP application, and wherein the means for automatically returning comprises:

means for sending the reply from the ERP application to the second messaging client;

means for forwarding the reply from the second messaging client to the second messaging server;

means for forwarding the reply from the second messaging server to the first messaging server;

means for forwarding the reply from the first messaging server to the first messaging client on the hosting server; and

means for returning the reply from the hosting server to the browser for display.

45. (Original) The system of claim 44, wherein means for forwarding the reply from the second server to the first server comprises means for forwarding the reply through a fire wall.

46. (Original) The system of claim 44, wherein means for forwarding the reply from the second messaging client to the second server comprises means for encrypting the reply.

47. (Original) The system of claim 46, wherein means for forwarding the reply from the first server to the first messaging client on the hosting server comprises means for decrypting the reply.

48. (Original) The system of claim 44, wherein means for returning the reply from the hosting server to the browser for display thereby comprises means for employing encryption for the reply.

49. (Original) The system of claim 48, wherein the means for employing comprises means for employing at least 128-bit Secure Socket Layer (SSL) encryption.

50. (Original) The system of claim 35, wherein means for forwarding the communication from the hosting server to the messaging middleware and means for forwarding the communication from the messaging middleware to the ERP application comprise means for forwarding over a private network.

51. (Original) The system of claim 31, wherein the front end application comprises a browser, wherein the messaging middleware comprises at least two messaging clients and at least one messaging server, and wherein the means for automatically routing comprises:

means for sending the communication from the browser to a hosting server for a site on a global computer network, wherein one of the at least two messaging clients resides on the hosting server;

means for forwarding the communication from the hosting server to the at least one messaging server;

means for forwarding the communication from the at least one messaging server to another of the at least two messaging clients; and

means for forwarding the communication from the another of the at least two messaging clients to the ERP application.

52. (Original) The system of claim 31, wherein the messaging middleware comprises MQSERIES and the ERP application comprises SAP.

53. (Original) The system of claim 31, wherein the messaging middleware comprises MQSERIES.

54. (Original) The system of claim 31, wherein the messaging middleware comprises MSMQ.

55. (Original) The system of claim 30, wherein the ERP application comprises SAP.

56. (Original) The system of claim 30, wherein the ERP application comprises BAAN.

57. (Previously Presented) At least one program storage device readable by a machine, tangibly embodying at least one program of instructions executable by the machine to perform a method for synchronous communication between a public electronic environment and a private electronic environment, comprising:

automatically routing a communication from a user in the public electronic environment to the private electronic environment;

causing a reply to the communication to be produced within the private electronic environment in real time; and

automatically returning the reply from the private electronic environment to the public electronic environment.

58. (Original) The at least one program storage device of claim 57, wherein the public electronic environment comprises a front end application, wherein the private electronic environment comprises a back end Enterprise Resource Planning (ERP) application, wherein the automatically routing comprises automatically routing the communication from the front end application to the back end ERP application, wherein the causing comprises causing the ERP application to produce the reply, and wherein the automatically returning comprises automatically returning the reply from the ERP application to the front end application for providing to the user.

59. (Previously Presented) The at least one program storage device of claim 58, wherein the automatically routing comprises routing the communication through messaging middleware, and wherein the causing comprises causing by the messaging middleware the ERP application to produce the reply while the front end application and the messaging middleware wait therefor.

60. (Original) The at least one program storage device of claim 59, wherein the causing further comprises causing by the messaging middleware a command to be issued to the ERP application to trigger production of the reply.

61. (Original) The at least one program storage device of claim 59, wherein the automatically returning comprises returning the reply from the ERP application to the front end application through the messaging middleware.

62. (Original) The at least one program storage device of claim 59, wherein the front end application comprises a browser.

63. (Original) The at least one program storage device of claim 62, wherein the automatically routing comprises:

sending the communication from the browser to a hosting server for a site on a global computer network;

forwarding the communication from the hosting server to the messaging middleware; and

forwarding the communication from the messaging middleware to the ERP application.

64. (Original) The at least one program storage device of claim 63, wherein the sending comprises employing encryption for the communication.

65. (Original) The at least one program storage device of claim 64, wherein the employing comprises employing at least 128-bit Secure Socket Layer (SSL) encryption.

66. (Original) The at least one program storage device of claim 63, wherein the messaging middleware comprises a first messaging client on the hosting server, a first messaging server, a second messaging server, and a second messaging client, and wherein forwarding the communication from the hosting server to the messaging middleware comprises:

forwarding the communication from the first messaging client to the first messaging server;

forwarding the communication from the first messaging server to the second messaging server; and

forwarding the communication from the second messaging server to the second messaging client.

67. (Previously Presented) The at least one program storage device of claim 66, wherein forwarding the communication from the first messaging client to the first messaging server comprises generating by the first messaging client a token identifier and forwarding the token identifier along with the communication, and wherein the automatically returning comprises returning the token identifier to the first messaging client for verification.

68. (Original) The at least one program storage device of claim 66, wherein forwarding the communication from the first messaging client to the first messaging server comprises encrypting the communication by the first messaging client.

69. (Original) The at least one program storage device of claim 68, wherein forwarding the communication from the second messaging server to the second messaging client comprises decrypting the communication by the second messaging server.

70. (Original) The at least one program storage device of claim 66, wherein forwarding the communication from the first messaging server to the second messaging server comprises forwarding the communication across a fire wall.

71. (Original) The at least one program storage device of claim 66, wherein the second messaging client comprises a module for issuing a command to the ERP application, wherein the causing comprises issuing the command from the second messaging client to the ERP application to trigger production of the reply, and wherein forwarding the communication from the messaging middleware to the ERP application comprises forwarding the communication from the second messaging client to the ERP application.

72. (Previously Presented) The at least one program storage device of claim 66, wherein forwarding the communication from the messaging middleware to the ERP application comprises forwarding the communication from the second messaging client to the ERP application, and wherein the automatically returning comprises:

 sending the reply from the ERP application to the second messaging client;

 forwarding the reply from the second messaging client to the second messaging server;

 forwarding the reply from the second messaging server to the first messaging server;

 forwarding the reply from the first messaging server to the first messaging client on the hosting server; and

 returning the reply from the hosting server to the browser for display.

73. (Original) The at least one program storage device of claim 72, wherein forwarding the reply from the second server to the first server comprises forwarding the reply through a fire wall.

74. (Original) The at least one program storage device of claim 72, wherein forwarding the reply from the second messaging client to the second server comprises encrypting the reply.

75. (Original) The at least one program storage device of claim 74, wherein forwarding the reply from the first server to the first messaging client on the hosting server comprises decrypting the reply.

76. (Original) The at least one program storage device of claim 72, wherein returning the reply from the hosting server to the browser for display thereby comprises employing encryption for the reply.

77. (Original) The at least one program storage device of claim 76, wherein the employing comprises employing at least 128-bit Secure Socket Layer (SSL) encryption.

78. (Original) The at least one program storage device of claim 63, wherein forwarding the communication from the hosting server to the messaging middleware and forwarding the communication from the messaging middleware to the ERP application comprise forwarding over a private network.

79. (Original) The at least one program storage device of claim 59, wherein the front end application comprises a browser, wherein the messaging middleware comprises at least two messaging clients and at least one messaging server, and wherein the automatically routing comprises:

sending the communication from the browser to a hosting server for a site on a global computer network, wherein one of the at least two messaging clients resides on the hosting server;

forwarding the communication from the hosting server to the at least one messaging server;

forwarding the communication from the at least one messaging server to another of the at least two messaging clients; and

forwarding the communication from the another of the at least two messaging clients to the ERP application.

80. (Original) The at least one program storage device of claim 59, wherein the messaging middleware comprises MQSERIES and the ERP application comprises SAP.

81. (Original) The at least one program storage device of claim 59, wherein the messaging middleware comprises MQSERIES.

82. (Original) The at least one program storage device of claim 59, wherein the messaging middleware comprises MSMQ.

83. (Original) The at least one program storage device of claim 58, wherein the ERP application comprises SAP.

84. (Original) The at least one program storage device of claim 58, wherein the ERP application comprises BAAN.

85. (Previously Presented) A method for providing a computing infrastructure, comprising:

integrating computer-readable code into a computing system, wherein the computer-readable code in combination with the computing system is adapted to perform:

automatically routing a communication from a user in a public electronic environment to a private electronic environment;

causing a reply to the communication to be produced within the private electronic environment in real time; and

automatically returning the reply from the private electronic environment to the public electronic environment.

86. (Previously Presented) The method of claim 85, wherein the public electronic environment comprises a front end application, wherein the private electronic environment comprises a back end Enterprise Resource Planning (ERP) application, wherein the automatically routing comprises automatically routing the communication from the front end application to the back end ERP application, wherein the causing comprises causing the ERP application to produce the reply, and wherein the automatically returning comprises automatically returning the reply from the ERP application to the front end application for providing to the user.

87. (Previously Presented) The method of claim 86, wherein the automatically routing comprises routing the communication through messaging middleware, and wherein the causing comprises causing by the messaging middleware the ERP application to produce the reply while the front end application and the messaging middleware wait therefor.

88. (Previously Presented) The method of claim 87, wherein the causing further comprises causing by the messaging middleware a command to be issued to the ERP application to trigger production of the reply.

89. (Previously Presented) The method of claim 87, wherein the automatically returning comprises returning the reply from the ERP application to the front end application through the messaging middleware.

90. (Previously Presented) The method of claim 87, wherein the front end application comprises a browser.

91. (Previously Presented) The method of claim 90, wherein the automatically routing comprises:

sending the communication from the browser to a hosting server for a site on a global computer network;

forwarding the communication from the hosting server to the messaging middleware; and

forwarding the communication from the messaging middleware to the ERP application.

92. (Previously Presented) The method of claim 91, wherein the sending comprises employing encryption for the communication.

93. (Previously Presented) The method of claim 92, wherein the employing comprises employing at least 128-bit Secure Socket Layer (SSL) encryption.

94. (Previously Presented) The method of claim 91, wherein the messaging middleware comprises a first messaging client on the hosting server, a first messaging server, a second messaging server, and a second messaging client, and wherein forwarding the communication from the hosting server to the messaging middleware comprises:

forwarding the communication from the first messaging client to the first messaging server;

forwarding the communication from the first messaging server to the second messaging server; and

forwarding the communication from the second messaging server to the second messaging client.

95. (Previously Presented) The method of claim 94, wherein forwarding the communication from the first messaging client to the first messaging server comprises generating by the first messaging client the token identifier and forwarding a token identifier along with the communication, and wherein the automatically returning comprises returning the token identifier to the first messaging client for verification.

96. (Previously Presented) The method of claim 94, wherein forwarding the communication from the first messaging client to the first messaging server comprises encrypting the communication by the first messaging client.

97. (Previously Presented) The method of claim 96, wherein forwarding the communication from the second messaging server to the second messaging client comprises decrypting the communication by the second messaging server.

98. (Previously Presented) The method of claim 94, wherein forwarding the communication from the first messaging server to the second messaging server comprises forwarding the communication across a fire wall.

99. (Previously Presented) The method of claim 94, wherein the second messaging client comprises a module for issuing a command to the ERP application, wherein the causing comprises issuing the command from the second messaging client to the ERP application to trigger production of the reply, and wherein forwarding the communication from the messaging middleware to the ERP application comprises forwarding the communication from the second messaging client to the ERP application.

100. (Previously Presented) The method of claim 94, wherein forwarding the communication from the messaging middleware to the ERP application comprises forwarding the communication from the second messaging client to the ERP application, and wherein the automatically returning comprises:

 sending the reply from the ERP application to the second messaging client;

 forwarding the reply from the second messaging client to the second messaging server;

 forwarding the reply from the second messaging server to the first messaging server;

 forwarding the reply from the first messaging server to the first messaging client on the hosting server; and

 returning the reply from the hosting server to the browser for display.

101. (Previously Presented) The method of claim 100, wherein forwarding the reply from the second server to the first server comprises forwarding the reply through a fire wall.

102. (Previously Presented) The method of claim 100, wherein forwarding the reply from the second messaging client to the second server comprises encrypting the reply.

103. (Previously Presented) The method of claim 102, wherein forwarding the reply from the first server to the first messaging client on the hosting server comprises decrypting the reply.

104. (Previously Presented) The method of claim 100, wherein returning the reply from the hosting server to the browser for display thereby comprises employing encryption for the reply.

105. (Previously Presented) The method of claim 104, wherein the employing comprises employing at least 128-bit Secure Socket Layer (SSL) encryption.

106. (Previously Presented) The method of claim 91, wherein forwarding the communication from the hosting server to the messaging middleware and forwarding the communication from the messaging middleware to the ERP application comprise forwarding over a private network.

107. (Previously Presented) The method of claim 87, wherein the front end application comprises a browser, wherein the messaging middleware comprises at least two messaging clients and at least one messaging server, and wherein the automatically routing comprises:

sending the communication from the browser to a hosting server for a site on a global computer network, wherein one of the at least two messaging clients resides on the hosting server;

forwarding the communication from the hosting server to the at least one messaging server;

forwarding the communication from the at least one messaging server to another of the at least two messaging clients; and

forwarding the communication from the another of the at least two messaging clients to the ERP application.

108. (Previously Presented) The method of claim 87, wherein the messaging middleware comprises MQSERIES and the ERP application comprises SAP.

109. (Previously Presented) The method of claim 87, wherein the messaging middleware comprises MQSERIES.

110. (Previously Presented) The method of claim 87, wherein the messaging middleware comprises MSMQ.

111. (Previously Presented) The method of claim 86, wherein the ERP application comprises SAP.

112. (Previously Presented) The method of claim 86, wherein the ERP application comprises BAAN.

Mantena et al.
09/751,069
12/29/2000

-49-

YOR920000555US1

EVIDENCE APPENDIX

NONE

Mantena et al.
09/751,069
12/29/2000

-50-

YOR920000555US1

RELATED PROCEEDINGS APPENDIX

NONE